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Mayer et al.

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(54) **METHOD OF ANCHORING AN IMPLANT IN TISSUE**

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411/82.5

See application file for complete search history.

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A61B 17/68 (2006.01)

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(58) **Field of Classification Search**

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(57) **ABSTRACT**

A method of anchoring an implant in hard tissue, and/or hard tissue replacement material, includes the steps of providing an initial opening in the hard tissue, providing a thermo-plastic augmentation element, a tool and a counter element, compressing the augmentation element between the tool and the counter element while energy is coupled into the tool and while a periphery of a liquefaction interface of the tool and the augmentation element and/or of a liquefaction interface of the augmentation element and the counter element is in the opening, thereby liquefying material of the augmentation element at the liquefaction interface(s) to yield liquefied material, causing portions of the liquefied material to penetrate into structures of the hard tissue, allowing the liquefied material to harden and to thereby become augmentation material, removing the tool and the counter element, and anchoring the implant in the opening including at least some of the augmentation material.

13 Claims, 2 Drawing Sheets

